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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,692	04/08/2004	Robert L. Heimann	EL021RH-3	8536

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EXAMINER
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LAVILLA, MICHAEL E

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/820,692

Applicant(s)

HEIMANN ET AL.

Examiner

Michael La Villa

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-19 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040830.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).
2. Throughout the Specification, applicant indicates a desire to "incorporate by reference" various foreign patent documents and ordinary publications. To the extent that the referred to subject matter is "essential material," the request for "incorporation by reference" is improper and objected to. Applicant should amend the Specification in the appropriate manner in order to include such "essential material," if any.
3. In the Specification, applicant refers to numerous United States patent applications with varying degrees of description. Where possible, provision of serial numbers and/or issued patent numbers, instead of attorney docket numbers, is requested. In this manner, the reader will be able to locate the described subject matter.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
5. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).
6. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).
7. Claim 3 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18 of U.S. Patent No. 6,761,934. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of Claim 18 of USP 6,761,934 anticipates the claimed subject matter of Claim 3 of this application. Absent a terminal disclaimer, a patent to the subject matter of Claim 3 would improperly enhance the rights to the subject matter of Claim 18 of USP 6,761,934.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:
9. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 4, 10-13, 16, 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant has amended by preliminary amendment several of the claims without pointing to antecedent support in the originally filed Specification of which this application is a continuation. It is unclear where the following claimed features are taught in the originally filed Specification or why one of ordinary skill in the art would discern that applicant was in possession of the claimed invention at the time of filing of the original Specification:

- I. Regarding Claim 4, it is unclear how the particle size of less than about 50 nm is taught.
- II. Regarding Claim 10, it is unclear how about 1 weight percent sodium silicate is taught, as opposed to 1 weight percent.
- III. Regarding Claim 11, it is unclear how a chromated surface is taught.
- IV. Regarding Claim 12, it is unclear how inclusion of water dispersible polymer is taught.
- V. Regarding Claim 13, it is unclear how contacting with at least one acid is taught.
- VI. Regarding Claim 16, it is unclear how a die cast zinc surface is taught.

- VII. Regarding Claim 19, it is unclear how the claimed alkali to silica ratio is taught.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

12. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1, 2, 5-11, and 13-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- I. Regarding Claim 1, it is unclear whether the claimed contacting step encompasses applying a coating and subsequently heating the coating, i.e., medium, to a temperature in excess of about 50°C or whether the coating material is necessarily applied at the claimed temperature, upon contacting the surface to the medium.
- II. Regarding Claim 13, it is unclear what is meant by the phrase "contacting with at least one acid." It is unclear what is to be contacted with acid. Is this the already treated surface, the medium, or the surface prior to treatment.
- III. Regarding Claim 19, it is unclear what is the ratio basis. Is this weight ratio, molar ratio or some other ratio?

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

15. A person shall be entitled to a patent unless –

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16. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claim 1 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by

McGowan et al. USP 6,033,495. McGowan teaches contacting a steel substrate with a composition that comprises alkaline silicate and carrier to form a coating on the substrate. McGowan suggests, but does not exemplify, including silica in the composition to make an effective coating. The coated substrate would be inherently expected to dry. See McGowan (Abstract; col. 6, line 55 through col. 8, line 43; and Claims in McGowan).

18. Claims 1, 5, 15, and 19 rejected under 35 U.S.C. 102(b) as being anticipated by Bartak et al. USP 5,266,412. Bartak et al. teaches coating a magnesium surface with an alkaline silicate solution at elevated temperature. See Bartak (col. 9, lines 20-29). Apparently, the treatment solution is 20 volume percent potassium silicate solution, which solution is comprised of 20 weight percent silica on a weight basis, which would meet the claimed concentration requirement of Claim 1.

### ***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- i. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- I. Determining the scope and contents of the prior art.
- II. Ascertaining the differences between the prior art and the claims at issue.
- III. Resolving the level of ordinary skill in the pertinent art.
- IV. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. Claims 1, 2, 5, 9, 14, 16, and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over McGowan et al. USP 6,033,495. McGowan teaches contacting a steel substrate with a composition that comprises alkaline silicate and carrier to form a coating on the substrate. McGowan suggests, but does not exemplify, including silica in the composition to make an effective coating.


McGowan suggests, but does not exemplify, that the coated substrate may be dried, rinsed, and dried in order to provide for a temporary coating (see Abstract; col. 6, line 55 through col. 8, line 43; and Claims in McGowan). In order for the silica to remain suspended in the solutions of McGowan, it would be expected that it is of colloidal form. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize colloidal silica in the composition of McGowan as McGowan teaches that including silica in the composition provides for an effective coating.



**Conclusion**

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Tuesday, Thursday, and alternating Fridays.
23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael La Villa  
31 May 2005

  
**MICHAEL E. LAVILLA PH.D.**  
**PRIMARY EXAMINER**